



SIG/Research in Mathematics Education  
American Educational Research  
Association Summer 2002 Newsletter

<http://teach.math.nevada.edu/sig/rme/>

**SIG/RME Executive Board**

**Co-Chairs**

Linda Ruiz Davenport  
Boston Public Schools  
2001-2003

Dan Chazan  
Michigan State University  
2002-2004

**Treasurer**

Cynthia Langrall  
Illinois State University  
2002-2004

**Recording Secretary**

Denise S. Mewborn  
University of Georgia  
2001-2003

**Electronic Communications Secretary**

(appointed)

Jeff Shih  
University of Nevada  
2002-2003

**Steering Committee**

Alfinio Flores  
Arizona State University  
2001-2003

Vic Cifarelli  
University of North Carolina-Charlotte  
2002-2004

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**Call for Nominations for Officers**

Nominations are being sought for the SIG/RME Executive Board positions of Co-Chair, Recording Secretary, Electronic Communications Secretary, and a Steering Committee Member for terms to run from April 2003–April 2005. A nomination form is included in this newsletter, or you may e-mail your nomination to Alfinio Flores at [alfinio@asu.edu](mailto:alfinio@asu.edu) by **September 15, 2002**. Self-nominations are also encouraged. The by-laws require that we have two candidates for each office. The duties of officers are posted on the SIG/RME web site.

**Zandieh Receives Research Award**

Michelle Zandieh of Arizona State University received the first annual SIG/RME Early Career Publication Award for her work titled “A Theoretical Framework for Analyzing Student Understanding of the Concept of Derivative,” which appeared in *CBMS Issues in Mathematics Education* in 2000. In recognition of her work, Michelle received a \$500 check and a plaque at the 2002 NCTM Research Presession opening session.

### **Directory On-line**

The SIG/RME membership directory is now available on-line. Go to the SIG/RME web site (<http://teach.math.nevada.edu/sig/rme/>), and click on the link that says "Membership Directory." You will be asked for a user ID and password (in order to protect you from being bombarded by unwanted email from non-members). The user ID is **math**, and the password is **sigrme**.

### **Call for AERA Proposals**

Proposals for the 2003 AERA conference are due August 1 or 2 (see <http://aera.net> for details). All submissions must be electronic via the conference web site. Where appropriate, please indicate that your proposal could be co-sponsored by SIG/RME and another SIG or Division of AERA to maximize the number of mathematics education sessions on the program.

### **Treasury Status**

The SIG/RME treasury has grown steadily over the years to the point that we currently have a balance in excess of \$20,000. At the annual meeting, questions were raised about why SIG/RME needs such a large balance and what might be done to reduce the balance. (See the minutes of the annual meeting for details of this discussion.) The Executive Committee was charged with bringing a proposal before the membership at the next annual meeting. If you have comments on this matter, please direct them to Treasurer Cindy Langrall at [langrall@ilstu.edu](mailto:langrall@ilstu.edu). Please see p. 7 for the detailed Treasurer's Report for 2001-02.

### **Check Your Membership!**

Please remember that there has been a change in the membership policy as dictated by AERA. You should now renew your SIG/RME membership when you renew your AERA membership. (Download the form at [http://www.aera.net/member/SIG\\_renewal\\_for\\_m.rtf](http://www.aera.net/member/SIG_renewal_for_m.rtf).) This way, all funds will be processed by AERA, and your membership dates will always be the same. If you wish to be a member of SIG/RME only, download the membership form from the SIG/RME web site, and send it to Cindy Langrall with your dues.

**Because slots on the AERA annual meeting program are allocated to our SIG based on the number of people who are members of both SIG/RME and AERA, we strongly encourage you to become a member of both organizations.**

As a result of the change in membership practices, there are some discrepancies between the membership list maintained by SIG/RME for mailing purposes and the list maintained by AERA. Cindy Langrall is working diligently with AERA to resolve these conflicts. Please be patient while she works on this challenging task. If you believe your membership information is in error, please work with Cindy and with AERA to resolve discrepancies. Until these differences are resolved, SIG/RME is attempting to maintain a very liberal mailing list in order to include as many people as possible in our mailings. If your mailing address is incorrect, please use the form at the end of this newsletter to send corrections to Cindy.

## Call for Nominations for Research Award

The Special Interest Group for Research in Mathematics Education established the "SIG/RME Early Career Publication Award" in 2001. The first award was presented to Michelle Zandieh in 2002 (see related article). The purpose of the award is to recognize outstanding mathematics education research publications by individuals within five years of receiving their doctoral degrees. The award includes a stipend of \$500, announcement in the SIG/RME newsletter and on the SIG/RME website, and recognition at the annual NCTM Research Pre-session.

The paper being nominated for the SIG/RME Early Career Publication Award may be based on the dissertation work of the nominee or other recent research the nominee has conducted. The nominee should be either the single author or the first author (in the case of a jointly authored paper). Note that only published articles are eligible for nomination; the award will not be given for a dissertation. The nominee should have received his/her doctoral degree in mathematics education no earlier than 5 years prior to the nomination deadline (e.g., no earlier than September 1997 for nominations due by September 1, 2002).

Nominations should include (and are restricted to) **2 copies** of the following:

- (1) a letter nominating the author of an early career publication. Please include the name of author, the date he/she received the doctoral degree, and the name of the institution that conferred the degree. The nominator should also include reasons that the paper should be considered as an example of an outstanding mathematics education research publication. If the article is based on the author's dissertation, please include the name of dissertation director and complete bibliographic information about the dissertation (including the dissertation abstract's number). (Self nominations will be accepted.)
- (2) a copy of the published paper, including complete bibliographic information.
- (3) a copy of the Table of Contents of the journal in which the paper appeared.

Nominations will be considered by a committee consisting of the Steering Committee Members of the SIG/RME Executive Board. The decisions of that committee will be final. Please send nomination materials **by September 1, 2002** to

Vic Cifarelli  
University of North Carolina-Charlotte  
Dept of Mathematics  
Charlotte, NC 28223

## Important Dates

### 2002

- August 1 Deadline for AERA proposals (all SIGs, Divisions I, J, K, L)  
<http://www.aera.net/meeting/am2002/call02>
- August 2 Deadline for AERA proposals (Divisions A-H, all committees)  
<http://www.aera.net/meeting/am2002/call02>
- August 23 Deadline for NCTM Research Pre-session proposals  
[http://www.nctm.org/about/committees/rac/pre-session/rac\\_pre-session.htm](http://www.nctm.org/about/committees/rac/pre-session/rac_pre-session.htm)
- September 1 Nominations for SIG/RME Research Publication Award due to Vic Cifarelli
- September 15 Nominations for SIG/RME officers due to Alfinio Flores
- October 26-29 PME-NA in Athens, GA <http://www.pmena.org/2002>

### 2003

- Jan. 30-Feb. 1 Association of Mathematics Teacher Educators (AMTE) annual meeting in Atlanta <http://www.amte.net>
- April 7-9 NCTM Research Pre-session in San Antonio  
(Note that this is a Monday, Tuesday, Wednesday.)  
[http://www.nctm.org/about/committees/rac/rac\\_pre-session.htm](http://www.nctm.org/about/committees/rac/rac_pre-session.htm)
- April 9-12 NCTM Annual Meeting in San Antonio  
<http://www.nctm.org/meetings/sanantonio/index.htm>
- April 21-25 AERA in Chicago <http://aera.net>
- July 13-18 PME-NA and PME International joint meeting at University of Hawaii-Manoa <http://www.pmena.org>

## **Minutes of the SIG/RME Business Meeting**

April 4, 2002

New Orleans, LA

The meeting was called to order by Co-Chair Norma Presmeg.

I. Approval of the Minutes from the April 11, 2001 meeting in Seattle.

The minutes of the 2001 Business Meeting were approved.

II. Treasurer's Report

Treasurer Cindy Langrall presented a report on the finances of SIG/RME. The balance stands at \$20,549.46, which is virtually unchanged from last year. Income derived from membership dues was approximately \$3500. Expenses for the annual meeting were approximately \$1200, and expenses for printing and mailing the newsletters and directory were approximately \$1900. Other administrative expenses totaled approximately \$470. A complete report appears at the end of the minutes.

Cindy noted that SIG/RME maintains 2 accounts: one with AERA and one with Fidelity Investments. The AERA account has in excess of \$17,000 in it. Thus, Cindy plans to move some of this money to the Fidelity account.

Nancy Mack asked why there is so much money in the organization's account. Why is this money needed? Norma noted that it is wise to have some financial cushion for expenses such as the AERA reception. She noted that the only income SIG/RME receives is from dues, so we could opt to reduce our dues from \$15 to \$5, which is the minimum allowed by AERA. Dara Sandow proposed that funds could be allotted for a grant program to provide mentoring to novice researchers. Walter Secada proposed that the organization delegate to the Steering Committee the responsibility of examining the finances and bringing a proposal for reducing the balance to the membership in 2003. It was suggested that comments be solicited from members via the summer newsletter.

Cindy thanked the previous Treasurer, Janet Bowers, for her work the prior year. Cindy noted that she is still in the process of working with AERA to construct an accurate membership list.

III. Election results

Norma Presmeg thanked current officers for their work. In particular, Jeff Shih and Cindy Langrall were thanked for filling Janet Bowers' unexpired term as Electronic Communications Secretary and Treasurer.

On behalf of Jinfa Cai, Norma announced that Dan Chazan will serve as Co-chair, Cindy Langrall as Treasurer, and Vic Cifarelli as Steering Committee Member for 2002-2004.

In 2002 we offered members the option of voting electronically via the organization's web site. This year 37 ballots were received by mail and over 100 were received electronically. The members approved the continuation of electronic voting.

#### IV. Research Pre-session at NCTM

Linda Davenport reported that over 900 people were preregistered for the meeting in Las Vegas. Mentoring sessions for novice researchers are being continued, and there is a continued emphasis on the importance of discussion time during each session.

#### V. AERA meeting

Norma Presmeg reported that this was the first year that all proposal processing was handled electronically. SIG/RME was allocated 7 sessions and 13 paper discussion sessions (formerly roundtables) based on SIG/RME and AERA membership ( $n = 421$ ) (one per every 43 members). We received 51 proposals, including 3 symposia. The acceptance rate is difficult to determine because some were assigned to session types other than what they requested. The acceptance rate for paper sessions was 50% (meaning that half of the people who submitted proposals for paper sessions were granted paper sessions). Only three proposals were rejected (rather than being assigned to an alternative format). All papers were reviewed by 3 or 4 reviewers. There were three sessions with multiple papers on the themes of equity, cognitive issues, and teaching/beliefs.

Norma noted that in the past it has been the practice for SIG/RME to fund the use of a graduate assistant to assist with the AERA program. Because there was no paperwork (due to the electronic processing) and because the electronic system was new, Norma did not use a GA this year. However, now that she has seen the electronic process in its entirety, she has determined that there are tasks that a GA can do to assist with the program. Thus, it is recommended that we continue the practice of funding a GA (at \$1000) to assist with the AERA program. (Post-meeting follow-up: This year the funds will be used to provide a GA to assist Cindy Langrall with getting the membership list updated with AERA.)

A question was raised about how non-SIG/RME mathematics education-related sessions (such as those in Divisions C, K, and L) are chosen. They are chosen in the same manner as SIG/RME sessions by chairs of those divisions after peer review. It was suggested that SIG/RME compile a list of all mathematics education sessions at AERA and release it to members via the winter newsletter or on the web site because the program that is released by AERA is often released very late. This is a possible task for a GA.

Norma reported that the new AERA director is hoping to make closer links between SIGs and the rest of AERA. SIGs can co-sponsor sessions with Divisions to get wider publicity.

#### VI. Early Career Award Announcement

On behalf of Alfinio Flores, Norma announced that the inaugural Early Career Publication Award will be presented to Michelle Zandieh of Arizona State University at the Research Pre-session at NCTM. She will receive a \$500 honorarium and a plaque. The award will be presented annually with the call for

nominations appearing in the summer newsletter. Members are encouraged to nominate deserving individuals for the award.

#### VII. Directory and newsletter

Denise Mewborn reported that the paper copy of the membership directory was mailed in March and should have been received by members. Any member needing an extra paper copy (such as for an office staff member) should contact Denise.

It has been recommended that the membership directory be put on the web in addition to or instead of the paper copy. Members discussed the pros and cons of this and agreed that they would like to continue to receive a paper copy. The directory will be put on the web, but it will be password-protected to avoid outsiders “spamming” members with email. Jeff Shih and Denise will work together to get the directory on-line, and members will be notified of the password (same password for all members) via the newsletter.

The newsletter is now being posted in pdf format on the web site. Contact Cindy Langrall if you prefer to receive an e-mail alerting you that the newsletter has been posted rather than receiving a paper copy in the mail.

#### VIII. Web site

Denise Mewborn recommended that the organization pursue the acquisition of a stable site for the SIG/RME web site so as to avoid each new Communications Secretary having to establish a new site at his/her institution and forcing members to update their bookmarks every two years. At a meeting earlier in the day, Norma was informed that AERA may enable SIGs to use web space on the AERA server for this purpose. Jeff Shih will look into what AERA will provide and what it would cost to get a commercial domain name (such as [www.sigrme.org](http://www.sigrme.org)) and server space.

#### IX. PME and PME-NA Announcements

Sandy Dawson announced that PME and PME-NA will hold a joint meeting in Honolulu HI July 13-18, 2003. All SIG/RME members are invited to attend. The First Announcement containing the call for proposals will be available in late September with proposals due in December or January. For more information, contact Joe Zilliox ([zilliox@hawaii.edu](mailto:zilliox@hawaii.edu)) or Sandy Dawson ([Dawsons@prel.org](mailto:Dawsons@prel.org)).

PME-NA XXIV will be held in Athens, GA October 26-29, 2002. The deadline has passed for proposal submission, but all members are invited to attend the conference. For more information, visit <http://www.pmena.org/2002> or email Denise Mewborn at [pmena@coe.uga.edu](mailto:pmena@coe.uga.edu).

#### X. Adjournment

The meeting was adjourned. A reception followed.

TREASURER'S REPORT  
April 2001 – April 2002

<b>Balance 4/19/01</b>			<b>\$17,382.38</b>
Income			
	SIG Memberships (July 01-March 02)	\$3,499.00	
			<b>\$20,881.38</b>
Expenses	Annual meeting 01	\$1231.74	
	Newsletters and directory	\$1918.16	
	Administrative costs	\$322.67	
	SIG dues	\$150.00	
Balance 4/4/02			<b>\$17,258.81</b>
Fidelity Money Market Account		\$3,290.65	
<b>Combined Balance 4/4/02</b>			<b>\$20,549.46</b>

***HISTORY OF YEARLY BALANCES***

1995	\$7,296.08
1996	\$11,049.07
1997	\$12,143.95
1998	\$13,270.29
1999	\$14,662.60
2000	\$17,063.52
2001	\$20,574.20
2002	\$20,549.46

**Call for Proposals for  
Research Preession in San Antonio, Texas  
April 7–9, 2003**

The SIG/RME and the Research Advisory Committee of the NCTM will jointly sponsor a research preession before the NCTM Annual Meeting in San Antonio, Texas. The opening session will be held the evening of Monday, April 7, with concurrent sessions throughout the day on Tuesday April 8 and Wednesday April 9. **The deadline for receipt of proposals is Friday, August 23, 2002.**

The SIG/RME Executive Committee and the Research Advisory Committee of the NCTM believe that the research preession of the NCTM Annual Meeting provides a unique opportunity to examine issues of current interest to the mathematics education research community. These sessions typically differ from traditional research reporting sessions in that they include more integration across the individual presentations and more opportunities for audience participation. Sessions can last either 90 or 150 minutes.

Various formats may be used; the following formats have been successful in past preessions.

Research Symposium



This format includes several presentations focusing on the same issue from different perspectives or research orientations, usually followed by a reaction. This format typically includes time for audience discussion. The presenters, who should be chosen to reflect conflicting or complementary points of view, provide information on how their research “sub-communities” currently are thinking about or are addressing the issue. The presenters should exchange outlines of their papers in advance so that differences and similarities in the presentations can be stressed. Having received these outlines in advance, the reactor is expected to give a compare-and-contrast, state-of-the-art summary. A symposium is to be more than a collection of loosely related papers that deal with similar topics.

#### Thematic Presentation

In this kind of session there is one substantive presentation on a major theme (an accompanying prepared paper would be appropriate) with two or three prepared critiques/responses. Some time should be reserved for audience discussion. The primary presentation reports on a *program* of research or presents a particular view of a research issue; it should not be a report of a single research study. Reactors would receive an outline of the major presentation in advance of the session in order to provoke thought and discussion.

#### Work Session

Work sessions are designed to allow for sustained interactions around one topic for both attendees and organizers. It may be on a topic gaining increased interest, to which significant resources are being committed, and for which sufficient conceptualization is lacking, or it may be a topic of more established interest.

#### Poster Session

Poster sessions are designed to encourage the exchange of ideas. They combine the visual display of materials with the opportunity for individual informal discussion. Poster sessions reporting on research in progress are particularly encouraged.

Other formats. These suggested formats are not restrictive; other formats that achieve the goals specified above equally well will be considered. There is ample room on the regular NCTM and AERA programs for proposals with different goals, such as individual paper presentations. However, we urge those submitting presession proposals to consider these four formats seriously. Our goal is to stimulate useful, informative, thematic interaction among members of the research community.

#### Limits on Proposal Submission

Each participant will be allowed to appear on the program no more than once as a presenter and no more than once as a discussant/reactant. Proposals with overlapping presenters or discussants/reactants will not be sent forward for review until the overlaps are resolved.

#### Format for Submission of Proposals

Proposals should include:

- a cover sheet; see next page.
- a single-spaced, 500-word abstract that includes:
  - an overview of what the session will address,
  - a description of the scientific and educational significance of the topic,
  - a summary of each participant’s presentation, and
- a description of the session’s timetable.
- a list of all participants, including name, mailing address, phone number, and e-mail address. For each participant, briefly describe their qualifications with respect to the

proposal.

Proposals will be evaluated according to their significance, quality, and interest to the mathematics education community.

One copy of the proposal (with cover sheet) should be sent to the Research Department, National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191. **Proposals must be received by August 23, 2002.** Proposals can be submitted electronically in Word-compatible format to [research@nctm.org](mailto:research@nctm.org).

#### Registration

*To preregister, see the registration form in the 81st Annual Meeting conference preview brochure coming by mail this fall to all NCTM members.* You do not need to be an NCTM member to attend the conference, and you may preregister for the Research Presession even if you are not attending the Annual Meeting. If you are not an NCTM member, you may request an 81st Annual Meeting conference preview brochure by calling NCTM at (800) 304-7709. Registration will also be accepted at the door.

The registration fee for the two-day program will be \$40, including the opening reception Monday night. A reduced fee of \$20 will be available for students and for one-day registrations. Note that registration fees are not waived for speakers.

#### Additional Information

If you have questions, e-mail [research@nctm.org](mailto:research@nctm.org) or call (703) 620-9840, ext. 2191.

2003 NCTM Research Pre-session  
PROPOSAL COVER SHEET  
San Antonio, Texas  
April 7-9, 2003

Title \_\_\_\_\_

Organizer \_\_\_\_\_

Affiliation \_\_\_\_\_

Mailing Address \_\_\_\_\_

Phone Numbers: Work ( ) \_\_\_\_\_ Home ( ) \_\_\_\_\_

E-mail \_\_\_\_\_

Length of Format \_\_\_\_\_ 90 minutes \_\_\_\_\_ 150 minutes \_\_\_\_\_ Poster  
Session

Preferred Day: \_\_\_\_\_ Tuesday, April 8 \_\_\_\_\_ Wednesday, April 9 \_\_\_\_\_ Either Day

Participants. Identify the participants and indicate their roles (i.e., presenter, presider, discussant.)

Description. Provide a 20-40 word description of the session for use in the program.

Format. \_\_\_\_\_ Symposium \_\_\_\_\_ Thematic \_\_\_\_\_ Work Session  
\_\_\_\_\_ Poster Session

Other: \_\_\_\_\_

I hereby certify that all participants named have assured me of their willingness to participate and have certified that their papers have not been previously published or presented at other professional meetings and will not be presented at this year's AERA meeting.

Signature \_\_\_\_\_ Date \_\_\_\_\_  
(Typed is accepted if submitted electronically)

Send one copy of proposal (including cover sheet, 500-word abstract, timeline, and participant address list) to: National Council of Teachers of Mathematics, Marilyn Hala, 1906 Association Drive, Reston, VA 20191. **Proposals must be received by August 23, 2002.**

**Call for Nominations!!!**

Please indicate your nominations for the following offices. Your nominees should be members of SIG/RME. Please note that officers may not serve consecutive terms. Current officers are listed on p. 1 of this newsletter. It is not necessary to secure an individual's permission before making a nomination as the Steering Committee members will confirm that nominees are willing to run for election.

Co-Chairperson: \_\_\_\_\_

Recording Secretary: \_\_\_\_\_

Electronic Communications Secretary: \_\_\_\_\_

Steering Committee Member: \_\_\_\_\_

Send your nominations to Alfinio Flores by e-mail or post by **September 15, 2002**.

Alfinio Flores

[alfinio@asu.edu](mailto:alfinio@asu.edu)

Arizona State University

Curriculum and Instruction

Tempe, AZ 85287-0911

**Address Correction Requested!**

If your newsletter did not reach you at the correct address, please e-mail Cindy Langrall ([langrall@ilstu.edu](mailto:langrall@ilstu.edu)) with updated information, or mail the form below to her. If any of your contact information has changed since the last SIG/RME directory (e-mail address, phone number, etc.), please provide corrected information.

<b>Please update my information!</b>	
Name _____	
Institution _____	
Mailing Address _____	
_____	
_____	
Phone Number _____	Fax Number _____
e-mail Address _____	<u>AERA</u> Member Number _____
<small>(This information will assist us with keeping our membership records accurate and up-to-date with AERA.)</small>	
Cynthia Langrall Illinois State University Campus Box 4520 Normal, IL 61790-4520 <a href="mailto:langrall@ilstu.edu">langrall@ilstu.edu</a>	

Denise S. Mewborn, Recording Secretary  
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